

Application No. 10/757,607
Response to Office Action

Customer No. 01933

Listing of Claims:

1. (Currently Amended) An anode member for a solid electrolytic capacitor, said anode member comprising:
a valve metal thin plate; and
a valve metal powder layer formed on at least one plate
5 surface of said valve metal thin plate; and ~~sintered,~~
at least one groove formed in said valve metal powder layer;
~~having a groove~~
wherein said valve metal powder layer having the at least one groove formed therein is sintered to form the anode member.

2. (Currently Amended) An anode member as claimed in claim 1, wherein said groove has a depth corresponding to at least 20% or more of the a thickness of said valve metal powder layer.

3. (Currently Amended) An anode member as claimed in claim 1, ~~wherein said anode member further comprises~~ comprising a grooved portion which corresponds corresponding to a portion of said valve metal powder layer presented that is under said at
5 least one groove; [[,]]

wherein said grooved portion having has a thickness of not more than 50µm or less.

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4. (Currently Amended) An anode member as claimed in claim 1, wherein said valve metal powder layer has a thickness of at least 50µm or more.

5. (Currently Amended) An anode member as claimed in claim 1, wherein said groove is formed by masking to the plate surface of the valve metal thin plate and depositing said valve metal powder layer before sintering on the masked plate surface.

6. (Currently Amended) An anode member as claimed in claim 1, wherein said groove is formed by depositing the valve metal powder layer on the plate surface and stamping said valve metal powder layer ~~which is sintered.~~

7. (Currently Amended) An anode member as claimed in claim 1, wherein said groove is formed by depositing the valve metal powder layer on the plate surface and marking said valve metal powder layer ~~which is sintered.~~

8. (Currently Amended) An anode member as claimed in claim 1, wherein said valve metal is one of niobium (Nb) ~~or~~ and tantalum (Ta).

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9. (Currently Amended) A solid electrolytic capacitor comprising an the anode member as claimed in claim 1, a cathode, and a dielectric member.

10. (Currently Amended) A method of producing an anode member for a solid electrolytic capacitor, said method comprising: ~~the steps of~~

forming a valve metal powder layer on at least one plate surface of a valve metal thin plate, and forming at least one groove in said valve metal powder layer; and

sintering said valve metal powder layer, ~~said powder layer being provided with a~~ having the at least one groove formed therein.

11. (New) A method of producing the anode member for the solid electrolytic capacitor as claimed in claim 10, wherein the groove has a depth corresponding to at least 20% of a thickness of the valve metal powder layer.

12. (New) A method of producing the anode member for the solid electrolytic capacitor as claimed in claim 10, wherein a portion of said valve metal powder layer that is under said at least one groove forms a grooved portion; and

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5 wherein said grooved portion has a thickness of not more than 50µm.

13. (New) A method of producing the anode member for the solid electrolytic capacitor as claimed in claim 10, wherein the valve metal powder layer has a thickness of at least 50µm.

14. (New) A method of producing the anode member for the solid electrolytic capacitor as claimed in claim 10, wherein the valve metal powder layer and the at least one groove formed therein are formed by masking the plate surface of the valve metal thin plate and depositing a valve metal powder on the masked plate surface.

15. (New) A method of producing the anode member for the solid electrolytic capacitor as claimed in claim 10, wherein the valve metal powder layer and the at least one groove formed therein are formed by depositing a valve metal powder on the
5 plate surface of the valve metal thin plate and forming the at least one groove by stamping the valve metal powder deposited on the plate surface.

16. (New) A method of producing the anode member for the solid electrolytic capacitor as claimed in claim 10, wherein the

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valve metal powder layer and the at least one groove formed
therein are formed by depositing a valve metal powder on the
5 plate surface of the valve metal thin plate and forming the at
least one groove by marking the valve metal powder deposited on
the plate surface.

17. (New) A method of producing the anode member for the
solid electrolytic capacitor as claimed in claim 10, wherein the
valve metal is one of niobium (Nb) and tantalum (Ta).